In Attendance:

Cyndie Abeyta, USFWS Nabil Shafike, NMISC

Roberta Ball, Corps

Marc Sidlow, Corps/URGWOM Technical Team

James Chavez, City of Albuquerque Gail Stockton, Corps

Ellen Dietrich, SAIC/Corps Carole Thomas, USGS/URGWOM Technical Team

Conrad Keyes, Jr., Corps Consultant Jack Veenhuis, USGS
Charles Lujan, Pueblo of San Juan Tim J. Ward, UNM

Art Martinez, BIA Dave Wilkins, USGS/URGWOM Technical Team

Bill Miller, WJM Engineering, Inc./Corps Mark Yuska, USBR/URGWOM Technical Team

Dennis Oyenque, Pueblo of San Juan

Linda Oyenque, Pueblo of San Juan

- ❖ Gail Stockton opened the meeting and turned it over to Mark Yuska to review URGWOM Technical Team activities and the status of model development. His handout is appended to the end of these notes. Ouestions and discussion are summarized below.
 - The new accounting model that includes Jemez Canyon Dam and Abiquiu with native Rio Grande storage is being debugged and tested. This is an enhancement to the model.
 - The new San Juan-Chama loss method between Cochiti and Elephant Butte automatically applies administrative loss rates, apportioned by reach length, for the five reaches. The lag amount is applied entirely at the reach just above Elephant Butte, due to current modeling method limitations. This method will be revised in the future.
 - Question—What was used to obtain the evaporation data for Caballo and Elephant Butte?
 - Elephant Butte data is from USBR observed pan evaporation records. For Caballo Reservoir, 1989-2000 data are from El Paso USBR, and 1980-1988 data are from original USBR records that were checked, corrected, and/or estimated for missing values by URGWOM. 1975-1979 data were filled in by regression equation developed between Caballo and Elephant Butte pan evaporation data for the years 1980-2000.
 - Steve Bowser is working on collecting additional evaporation data for Elephant Butte.
 - ➤ A priority for the Technical Team is the acquisition of the final 2001 water accounting data to use in the 2002 URGWOM Accounting Model.
 - Question—Why isn't the USBR responsible for acquiring and checking these data instead of the Technical Team?
 - The Technical Team must set up the model and the data for initial use by water operators. This is the transition year for moving from one accounting year model to the next. This process is not yet automated, so it requires more Technical Team work to set up.
 - ➤ Tim Ward and Art Martinez are interested in reviewing the regression equations used to calculate river leakage.

- ➤ Charles Lujan expressed concern that most of the detailed modeling is for the middle valley below Cochiti, although more changes to the system could occur in the future upstream if Santa Fe installs an infiltration gallery to make use of river water. The impacts of these changes would be felt along the Rio Chama and in the Española valley, but the modeling may not be detailed enough to account for the changes.
 - Mark responded that URGWOM is more refined below Cochiti because the system is more complicated and there was too much error in river loss and inflow numbers in the middle valley. The Technical Team has greater confidence in the modeling results for groundwater/surface water interactions in URGWOM above Cochiti
 - The concerns over increased use of surface water in Santa Fe and the possible effect on groundwater are important and should be considered for enhancement to URGWOM during continued model maintenance.
- ➤ Question—How extensive is the model testing effort?
 - The Water Operations Model needs to be tested by organizations and consultants outside the core agencies. The Rio Grande Compact Commission is testing the Accounting Model. This would also help outside groups review the quality of URGWOM data.
 - The Water Operations Model has only been tested by the operators who develop the Annual Operating Plan so far. Use of URGWOM by the daily water operators is just beginning.
 - RiverWare is now available for the PC so it will be easier for others to use it to test URGWOM. The Technical Team will soon test the PC version with URGWOM. The PC version is just slightly behind the Unix version of RiverWare.



- The Data Subcommittee should meet to discuss and recommend who should test URGWOM outside the core agencies.
- Mark provided a handout of the Technical Team issues discussed and decisions made between October 16 and December 17, 2001.

MMS status

- ➤ Jack Veenhuis reported that the USGS modelers are calibrating the model using data from water years 1988-1998.
- > They are optimizing the final XYZ data and bringing in the most current climate data.
- ➤ The next step is to conduct some model runs to predict runoff.
- > Question—Is the model ready to perform some rough runs before snowmelt occurs?
 - Yes, they plan to do this soon so they can see how well the model runs and how accurate the runoff predictions are.
 - The URGWOM Steering Committee and the Technical Team would like to know the results so they can compare them to the NWS/NRCS predictions.
- ❖ Roberta Ball demonstrated the functioning and format of the URGWOM data and metadata on the web site. She has been working on some of the changes recommended at the last Steering Committee meeting.
 - ➤ Due to some technical problems with gathering the data from the spreadsheets, the data access part of the web site is not yet functioning on the web site.
 - ➤ Changes made since the last meeting include the addition of a list of acronyms, a link to the metadata, and a link to the data use agreement through a pop-up window.

- ❖ Technical Review Committee meeting
 - The group agreed that it would be reasonable to schedule a meeting for mid- to late June, after the Technical Team has had time to develop the AOP.
 - The meeting could review the current physical model and the rules and documentation for the Water Operations Model.
 - ➤ The Technical Team will develop a detailed agenda for the TRC meeting and discuss it at the February Steering Committee meeting. Once the agenda has been developed, the group can decide how long the meeting should last.
- ❖ Gail informed the group of the public meetings that will be held from January through May in the basin to review the draft alternatives for the Upper Rio Grande Basin Water Operations Review and EIS. The locations and dates of the meetings have been posted on the URGWOPS web site. Some issues that will be discussed at the meetings may be of interest to the URGWOM Steering Committee.



The next URGWOM Steering Committee meeting will be held on Thursday, February 14 at 10:00 a.m. at the Corps.

STATUS OF URGWOM TECH TEAM ACTIVITIES—MARK YUSKA

Activities:

- Vacations!
- Quality Control preparing and checking data for the Web. Web data to go up within next couple weeks.
- Directing, testing, and debugging the new Rio Grande Conservation account in Abiquiu and Jemez.
- Updated the Accounting model accordingly.
- Updated the Accounting model with SJ loss method between Cochiti and Elephant Butte.
- Performed in-house estimated corrections on earlier Caballo and Elephant Butte pan evaporation for the years 1980-2000, and used regression to add pan evaporations 1975-1979.
- Reworking the reach from San Marcial to Elephant Butte, due to lack of ET data and accurate daily EB inflow numbers.
- Made changes to the evapotranspiration and consumptive use DSS files in the San Acacia to Elephant Butte reaches to better reflect the reach where this data is applicable.
- Need to create Accounting 2002 model.
- Nambe Falls simplified accounting estimates are coming together. (CADSWES is slated to develop detailed methods this FY).
- Developed monthly regression equations for the below Cochiti to San Felipe, San Felipe to Central, and Central to Bernardo river reaches for use in a RiverWare URGWOM model using updated river leakage numbers, flow at an upstream gage, and Bosque ET.
- Evaluating the pros and cons of using the Kernodle and others ground-water flow model (1995) vs the current USGS-NMSEO developed ground-water flow model to develop input to the URGWOM planning model. The current model is completed and being documented.

Meetings:

- Web Data Team met 12/18/01 to discuss Web look and data details.
- Provided an orientation/training session for USBR operators on using water operations model, 12/19/01.
- Steve Bowser and Mark Yuska will attend the USBR Technical Team WaRSMP meeting in Boulder, CO, 1/24-25/02.
- Steve Markstrom (USGS-Denver) and Doug Boyle (DRI-Reno) will be here in February 4-8 to work on MMS for Rio Chama and down to Otowi on the Rio Grande. Some other basin-folk may visit.
- One day, week of 2/4/02, Mark will do a Water Operations Modeling demo down in El Paso for US and Mexico Sections of IBWC.

Issues:

- USBR has awarded \$100K to CADSWES for '02 work Thank You Steve Bowser and Steering Committee!
- FY02 Funding is in place for Dave Wilkins and Carole Thomas (retiring July '02) Kudos and Thanks again Steve, Gail, and Steering Committee!
- Bill Miller's contract is in place Way to go Gail!
- Brad Vickers' contract is pretty close to ready.
- Need to get 2002 Accounting Model set up for both daily accounting, and to do water operations modeling and Annual Operating Plan.
- We are using 1999 acreages for 2000 MRGCD, due to delay in getting reported acreages for the latter.
- HAPPY NEW YEAR!!